## NACC Derived Variables

# Description of NACC Derived Variables to be used in data analysis

### FOR NACC DERIVED VARIABLES COMPUTED FROM UDS V2.0, NEUROPATHOLOGY, MILESTONES, AND MDS DATA

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NACC
National Alzheimer's Coordinating Center

# Glossary

| | Variable name | Short descriptor | Data type |
|---|---|---|---|
| 1 | **naccavst** | Total number of UDS visits made | numeric cross-sectional |
| 2 | **naccnvst** | Number of in-person UDS visits made | numeric cross-sectional |
| 3 | **naccdays** | Days from initial visit to most recent visit | numeric cross-sectional |
| 4 | **naccfdys** | Days from initial visit to each follow-up visit | numeric longitudinal |
| 5 | **naccwndw** | UDS visit window | numeric longitudinal |
| 6a | **naccage** | UDS subject age at visit (years) | numeric longitudinal |
| 6b | **naccmage** | MDS subject age at most recent evaluation (years) | numeric cross-sectional |
| 7 | **naccageb** | Subject age at initial visit (years) | numeric cross-sectional |
| 8 | **naccnihr** | Derived NIH race definitions | numeric cross-sectional |
| 9 | **naccfamh** | Indicator for first-degree family member with dementia | numeric cross-sectional |
| 10 | **naccstat** | Participation status at the ADC | numeric cross-sectional |
| 11 | **naccnurs** | Reported residence in a nursing home | numeric cross-sectional |
| 12 | **naccudsd** | Cognitive status at UDS visit | numeric longitudinal |
| 13 | **naccmdsd** | Cognitive status at last MDS evaluation | numeric cross-sectional |
| 14 | **naccimci** | Incident MCI | numeric cross-sectional |
| 15 | **naccidem** | Incident dementia | numeric cross-sectional |
| 16 | **naccnorm** | Subject had normal cognition at all visits to date | numeric cross-sectional |
| 17 | **naccdimp** | Dementia diagnosis followed by diagnosis of improved cognition | numeric cross-sectional |
| 18a | **naccprad** | Dementia with primary probable AD (UDS, NINCDS/ARDA criteria) | numeric longitudinal |
| 18b | **naccmad** | Dementia with primary probable AD (MDS, NINCDS/ARDA criteria) | numeric cross-sectional |
| 19 | **naccaged** | Age of onset of cognitive decline (years) | numeric cross-sectional |
| 20 | **naccdied** | Subject is known to be deceased | numeric cross-sectional |
| 21 | **naccapoe** | APOE genotype | numeric cross-sectional |
| 22 | **naccne4s** | Number of APOE e4 alleles | numeric cross-sectional |
| 23 | **naccadgc** | Indicator of whether or not genotype data is available at ADGC | numeric cross-sectional |
| 24a | **naccacei** | Reported current use of an angiotensin converting enzyme (ACE) inhibitor | numeric longitudinal |
| 24b | **naccaaas** | Reported current use of an antiadrenergic agent | numeric longitudinal |
| 24c | **naccbeta** | Reported current use of a beta-adrenergic blocking agent (Beta-Blocker) | numeric longitudinal |

| | Variable name | Short descriptor | Data type |
|---|---|---|---|
| 24d | **naccccbs** | Reported current use of a calcium channel blocking agent | numeric longitudinal |
| 24e | **naccdiur** | Reported current use of a diuretic | numeric longitudinal |
| 24f | **naccvasd** | Reported current use of a vasodilator | numeric longitudinal |
| 24g | **nacchtnc** | Reported current use of an antihypertensive combination therapy | numeric longitudinal |
| 24h | **naccangi** | Reported current use of an angiotensin II inhibitor | numeric longitudinal |
| 25 | **nacclipl** | Reported current use of lipid lowering medication | numeric longitudinal |
| 26 | **naccnsd** | Reported curent use of nonsteroidal anti-inflammatory medication | numeric longitudinal |
| 27 | **naccac** | Reported current use of an anticoagulant or antiplatelet agent | numeric longitudinal |
| 28 | **naccadep** | Reported current use of an antidepressant | numeric longitudinal |
| 29 | **naccapsy** | Reported current use of an antipsychotic agent | numeric longitudinal |
| 30 | **naccaanx** | Reported current use of an anxiolytic, sedative, or hypnotic agent | numeric longitudinal |
| 31 | **naccadmd** | Reported current use of a FDA-approved medication for Alzheimer's disease symptoms | numeric longitudinal |
| 32 | **naccpdmd** | Reported current use of an antiparkinson agent | numeric longitudinal |
| 33 | **naccc1** | Form date discrepancy between UDS Form A1 and Form C1 | numeric longitudinal |
| 34 | **naccamd** | Total number of medications at each visit | numeric longitudinal |
| 35a | **naccemd** | Reported current use of estrogen hormone therapy | numeric longitudinal |
| 35b | **naccepmd** | Reported current use of estrogen + progestin hormone therapy | numeric longitudinal |
| 36 | **naccdbmd** | Reported current use of a diabetes medication | numeric longitudinal |
| 37 | **naccdage** | Derived age at death | numeric cross-sectional |
| 38 | **naccint** | Time interval (days) between last visit and death | numeric cross-sectional |
| 39 | **nacchiv** | HIV+ write-in on Form D1 | numeric longitudinal |
| 40 | **naccmnd** | Motor neuron disease write-in on Form D1 | numeric longitudinal |
| 41 | **naccpca** | Posterior cortical atrophy (PCA) write-in on Form D1 | numeric longitudinal |
| 42 | **nacccanc** | Cancer or tumor write-in on Form D1 | numeric longitudinal |
| 43 | **naccmdss** | Subject's status in the Minimal Data Set (MDS) and Uniform Data Set (UDS) | numeric cross-sectional |

# Description of NACC Derived Variables to be used in data analysis

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|---|---|---|
| 1. | Variable name | **naccavst** |
| | Short descriptor | Total number of all UDS visits made |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 1 – 20 |
| | Description/derivation | **UDS subjects:** This variable is calculated as the number of visits the subject made, regardless of the time between visits and whether the visit was in person or on the telephone. Subjects with naccavst = 1 have completed an initial visit only. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br><br>**MDS subjects:** naccavst is not calculated for MDS subjects as the MDS is not a longitudinal database. |

| | | |
|---|---|---|
| 2. | Variable name | **naccnvst** |
| | Short descriptor | Number of in-person UDS visits made |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 1 – 20 |
| | Description/derivation | **UDS subjects:** This variable is calculated as the number of in-person visits the subject made, regardless of the time between visits. Telepzhone visits are not included in the count. Subjects with naccnvst = 1 have completed an initial visit only. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br><br>**MDS subjects:** naccnvst is not calculated for MDS subjects as the MDS is not a longitudinal database. |

| | | |
|---|---|---|
| 3. | Variable name | **naccdays** |
| | Short descriptor | Days from initial visit to most recent visit |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 – 3650 |
| | Description/derivation | **UDS subjects:** This variable is calculated as the most recent visit date minus the initial visit date. All subjects completing the initial visit only will have naccdays = 0. Note that in order to obtain follow-up time in years, simply divide naccdays by 365.25. Also Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br><br>**MDS subjects:** naccdays is not calculated for MDS subjects as the MDS is not a longitudinal database. |

| | | |
|---|---|---|
| 4. | Variable name | naccfdys |
| | Short descriptor | Days from initial visit to each follow-up visit |
| | Data type | Numeric longitudinal |
| | Allowable codes | 0 – 3650 |
| | Description/derivation | **UDS subjects:** This variable is calculated as the follow-up visit date minus the initial visit date for every follow-up visit. All initial visits will have naccfdys = 0. Note that in order to obtain follow-up time in years, simply divide naccfdys by 365.25.<br>**MDS subjects:** naccfdys is not calculated for MDS subjects as the MDS is not a longitudinal database. |
| 5. | Variable name | naccwndw |
| | Short descriptor | UDS visit window |
| | Data type | Numeric longitudinal |
| | Allowable codes | 0 = Initial visit or <180 days since initial visit.<br>1 = 180 ≤ days since initial visit ≤ 545<br>2 = 546 ≤ days since initial visit ≤ 910<br>3 = 911 ≤ days since initial visit ≤ 1275<br>4 = 1276 ≤ days since initial visit ≤ 1640<br>5 = 1641 ≤ days since initial visit ≤ 2005<br>6 = 2006 ≤ days since initial visit ≤ 2370<br>7 = 2371 ≤ days since initial visit ≤ 2735 |
| | Description/derivation | **UDS subjects:** This variable is the UDS visit window in which each visit falls. The visit windows are defined by the number of days since the initial visit.<br>Note that all initial visits will have naccwndw = 0. It is also possible for a subject to have more than one visit within a window and/or skip a visit window.<br>**MDS subjects:** naccwndw is not calculated for MDS subjects as the MDS is not a longitudinal database. |
| 6a. | Variable name | naccage |
| | Short descriptor | UDS subject age at visit (years) |
| | Data type | Numeric longitudinal |
| | Allowable codes | 18 – 120 |
| | Description/derivation | **UDS subjects:** Birth month and year are required elements in the UDS; however, birth day is not collected. To calculate age, birth day is set to 1 for all subjects and computed as visit date – birth date. |
| 6b. | Variable name | naccmage |
| | Short descriptor | MDS subject age at most recent evaluation (years) |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 18 – 120 |
| | Description/derivation | **MDS subjects:** Birth month and day are NOT required elements in the MDS; however, birth year is collected. Birth day is set to '1' for subjects missing this data element, and if month is missing, 7 (July) is imputed. Age is not calculated for subjects who are missing birth year. In the MDS, age is computed as most recent evaluation date – birth date. |

| | | |
|---|---|---|
| 7. | **Variable name** | **naccageb** |
| | **Short descriptor** | Subject age at the initial visit (years) |
| | **Data type** | Numeric cross-sectional |
| | **Allowable codes** | 18 – 120 |
| | **Description/derivation** | **UDS subjects:** Birth month and year are required elements in the UDS; however, birth day is not collected. To calculate naccageb, birth day is set to 1 for all subjects. Baseline age is then computed as initial visit date – birth date. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br><br>**MDS subjects:** Age at initial visit is not calculated for MDS subjects. Please see naccmage for age of MDS subjects at most recent evaluation. |

| | | |
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| 8. | **Variable name** | **naccnihr** |
| | **Short descriptor** | Derived NIH race definitions |
| | **Data type** | Numeric cross-sectional |
| | **Allowable codes** | 1 = White<br>2 = Black or African American<br>3 = American Indian or Alaska Native<br>4 = Native Hawaiian or Pacific Islander<br>5 = Asian<br>6 = Multiracial<br>99 = Unknown or Ambiguous |
| | **Description/derivation** | **UDS subjects:** Some subjects have reported an other race that is not technically a race but rather an ethnicity or country of origin (e.g, Hispanic or Irish). We have created a derived race variable that is more consistent with the NIH guidelines for human subjects reporting. The categories are described as follows:<br><br>naccnihr = 1 for subjects with RACE = 1 or RACE = 50 with a write-in response that is considered white or Caucasian race<br><br>naccnihr = 2 for subjects with RACE = 2 or RACE = 50 with a write-in response that is considered black or African American<br><br>naccnihr = 3 for subjects with RACE = 3 or RACE =50 with a write-in response that is considered American Indian or Alaska Native<br><br>naccnihr = 4 for subjects with RACE = 4 or RACE = 50 with a write-in response that is considered Native Hawaiian or Pacific Islander<br><br>naccnihr = 5 for subjects with RACE = 5 or RACE = 50 with a write-in response that is considered Asian<br><br>naccnihr = 6 for subjects reporting multiple races or with RACE = 50 and a write-in response indicating mixed race including, but not limited to, “multiracial”, “biracial”, and “mestizo”<br><br>naccnihr = 99 for subjects with RACE=99 or with RACE = 50 and a write-in response that cannot be classified as one of the categories without additional information, including but not limited to, “Hispanic”, “American”, and “Unknown”.<br><br>Subjects reporting multiple races (Codes 1 – 5 for race and racesec, or for race, racesec and raceter) are coded to naccnihr = 6 “Multi-racial”. For some multiracial subjects (naccnihr = 6), additional information on their primary, secondary, and/or tertiary race can be found by looking at the race, racesec, and raceter variables.<br><br>Subjects reporting codes 1 through 5 for race, followed by racesec = 50 or raceter = 50, are assigned the original primary race reported if the write-in does not indicate a different race, or is ambiguous. For example, a subject that reports race = 1 (white) |

and then racesec = 50 with a write-in of "Irish" will still have naccnihr = 1 and will not be considered multi-racial.

If write-ins for racesec = 50 or raceter = 50 are indicative of additional race, then naccnihr = 6.

Additionally, race = 99 or ambiguous write-ins for primary race (race = 50) that are followed by codes 1 through 5 for racesec or raceter are coded as naccnihr = 99.

**MDS subjects:** A derived race variable has not been created for MDS subjects.

| 9. | | |
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| | Variable name | naccfamh |
| | Short descriptor | Indicator for first degree family member with dementia |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = No affected first degree family members reported with dementia<br>1 = At least one first degree family member reported with dementia<br>9 = No first-degree family history provided |
| | Description/derivation | **UDS subjects:** Subjects reporting a least one parent, sibling, or child with dementia at any visit meet the criteria for having a first degree family history of dementia (naccfamh = 1). Subjects that have at least one A3 Form filled out and that do not report a first-degree relative with dementia at any visit are coded as not having a first-degree family member with a history of dementia (naccfamh = 0). Subjects not completing the A3 Form during any visit are coded as missing (naccfamh = 9), as are those with a submitted A3 form, but are missing all necessary data. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br><br>**MDS subjects:** This datum is captured in the MDS variable rldem. If rldem = 1 then naccfamh = 1. If rldem = 2 then naccfamh = 0. If rldem = 8 or 9, then naccfamh = 9. |

| 10. | | |
|---|---|---|
| | Variable name | naccstat |
| | Short descriptor | Participation status at the ADC |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = Not Active<br>1 = Active |
| | Description/derivation | **UDS subjects:** Subjects can be enrolled for initial visit only or for longitudinal follow-up. After the initial visit, subjects can discontinue participation for a number of reasons. A subject's most recent status in the database can be dichotomized in the following way:<br><br>naccstat = 0 if the subject is not under active UDS follow-up (e.g., the subject has died, was discontinued, is followed for autopsy only, or was enrolled as initial visit only).<br><br>naccstat = 1 if the subject is under active follow-up and is expected to make additional visits, either in person or by telephone.<br><br>Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional. Additionally, it does not capture change in participation status. For example, subjects who were discontinued but who have since rejoined are coded as active (naccstat = 1), and subjects who were enrolled as IV-only (prespart = 1), but made additional visits and are now actively followed are coded as active (naccstat = 1).<br><br>**MDS subjects:** naccstat is not calculated for MDS subjects as the MDS is not a longitudinal database. |

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| 11. | Variable name | naccnurs |
| | Short descriptor | Reported residence in a nursing home |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = Did not report living in a nursing home/Unknown<br>1 = Lived in a nursing home |
| | Description/derivation | **UDS subjects:** Subjects with residenc = 3 or 4 and/or a Milestones Form reporting nursehom = 1 are indicated as living in a nursing home during at least one UDS visit, or previously as part of the MDS (naccnurs = 1). Otherwise, naccnurs = 0. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br><br>**MDS subjects:** Subjects with residenc = 3 or 4 and/or a Milestones Form reporting nursehom = 1 are indicated as living in a nursing home during observation (naccnurs = 1). Otherwise, naccnurs = 0. |
| 12. | Variable name | naccudsd |
| | Short descriptor | Cognitive status at UDS visit |
| | Data type | Numeric longitudinal |
| | Allowable codes | 1 = Normal cognition<br>2 = Impaired not MCI<br>3 = MCI<br>4 = Dementia |
| | Description/derivation | **UDS subjects:** The subject's cognitive status is determined at every visit. Since there is a finite number of possible diagnoses, we have created a categorical variable to capture this datum.<br><br>naccudsd = 1 for normal cognition (normcog = 1)<br>naccudsd = 2 for impaired not MCI (impnomci = 1)<br>naccudsd = 3 for any MCI (mciamem = 1 or mciaplus = 1 or mcinon1 = 1 or mcinon2 = 1)<br>naccudsd = 4 for dementia (demented = 1)<br><br>**MDS subjects:** For MDS subjects, please see naccmdsd variable. |
| 13. | Variable name | naccmdsd |
| | Short descriptor | Cognitive status at last MDS evaluation |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 1 = Normal cognition<br>2 = Questionable dementia or cognitive impairment<br>3 = Dementia |
| | Description/derivation | **MDS subjects:** The subject's cognitive status is determined from the visit record and is coded as follows:<br><br>naccmdsd = 1 for normal cognition (notdemci = 1)<br>naccmdsd = 2 for questionable dementia or cognitive impairment (notdemci = 3)<br>naccmdsd = 3 for dementia (clindem = 1)<br><br>**UDS subjects:** for UDS-only subjects, please see naccudsd variable. |

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| 14. | Variable name | naccimci |
| | Short descriptor | Incident MCI |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = Did not progress to MCI<br>1 = Progressed to MCI<br>9 = Initial visit only, or started as MCI/Dementia, or progressed directly to dementia |
| | Description/derivation | **UDS subjects:** Subjects with normal cognition (normcog = 1) or impaired not MCI (impnomci) at the initial visit who have a follow-up visit with MCI (mciamem = 1, mciaplus = 1, mcinon1 = 1, or mcinon2 = 1) will have naccimci = 1. Subjects with normal cognition (normcog =1 ) or impaired not MCI (impnomci) at every visit will have naccimci = 0. Those who revert from incident MCI to normal cognition will still have naccimci = 1. Subjects who have MCI or dementia at the initial visit will have naccimci = 9. Subjects who progress directly to dementia without an MCI diagnosis will also have naccimci = 9. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br>**MDS subjects:** naccimci is not calculated for MDS subjects as the MDS is not a longitudinal database. |
| 15. | Variable name | naccidem |
| | Short descriptor | Incident dementia |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = Did not progress to dementia<br>1 = Progressed to dementia<br>9 = Initial visit only or started as demented |
| | Description/derivation | **UDS subjects:** Subjects with normal cognition (normcog = 1 ), impaired not MCI (impnomci), or MCI (mcimem = 1, mciaplus = 1, mcinon1 = 1, or mcinon2 = 1) at the initial visit who have a follow-up visit with dementia (demented = 1) will have naccidem = 1. Subjects who do not progress to dementia will have naccidem = 0. Those with incident dementia who revert to normal cognition or MCI will still have naccidem = 1. Subjects who have dementia at the initial visit will have naccidem = 9. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br>**MDS subjects:** naccidem is not calculated for MDS subjects as the MDS is not a longitudinal database. |
| 16. | Variable name | naccnorm |
| | Short descriptor | Subject had normal cognition at all visits to date |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = Had a diagnosis other than normal cognition for at least one visit<br>1 = Had normal cognition at all visits |
| | Description/derivation | **UDS subjects:** This variable identifies subjects with normal cognition (normcog = 1) at all UDS visits. Subjects with at least one visit where the diagnosis was impaired not MCI (impnomci = 1), MCI (mciamem = 1, mciaplus = 1, mcinon1 = 1, or mcinon2 = 1), or dementia (demented = 1) will have naccnorm = 0.<br>**MDS subjects:** naccnorm is not calculated for MDS subjects as the MDS is not a longitudinal database. |

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|---|---|---|
| 17. | Variable name | naccdimp |
| | Short descriptor | Dementia diagnosis followed by a non-demented diagnosis |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = Did not have a non-demented diagnosis<br>1 = Had a non-demented diagnosis after dementia diagnosis<br>9 = Never diagnosed with dementia, or no follow-up after dementia diagnosis |
| | Description/derivation | **UDS subjects:** Subjects with dementia (demented = 1) who have a follow-up visit with a non-demented diagnosis are indicated by naccdimp = 1. Non-demented diagnoses include normal cognition (normcog = 1), impaired not MCI (impnomci), and MCI (mciamem = 1, mciaplus = 1, mcinon1 = 1, or mcinon2 = 1). Subjects who remain demented at all follow-up visits will have naccdimp = 0. Subjects with a non-demented diagnosis following a dementia diagnosis who then received another later diagnosis of dementia will still have naccdimp = 1. Subjects who are never diagnosed with dementia or who do not have a follow-up visit after their dementia diagnosis will have naccdimp = 9. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br>**MDS subjects:** naccdimp is not calculated for MDS subjects as the MDS is not a longitudinal database. |

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|---|---|---|
| 18a. | Variable name | naccprad |
| | Short descriptor | UDS, dementia with primary probable AD (NINCDS/ARDA criteria) |
| | Data type | Numeric longitudinal |
| | Allowable codes | 0 = Did not have dementia with probable AD<br>1 = Dementia with probable AD diagnosed |
| | Description/derivation | **UDS subjects:** For each visit, subjects with dementia (demented = 1) and probable AD as the primary clinical diagnosis (probadif = 1) will have naccprad = 1. Subjects who do not have a dementia diagnosis will have naccprad = 0, as will subjects with dementia but with another primary diagnosis. |

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| 18b. | Variable name | naccmad |
| | Short descriptor | MDS, dementia with primary probable AD (NINCDS/ARDA criteria) |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = Did not have dementia with probable AD<br>1 = Dementia with probable AD diagnosed |
| | Description/derivation | **MDS subjects:** Subjects with dementia (clindem = 1) and probable AD as the primary clinical diagnosis (cldemdx = 1) will have naccprad = 1. Subjects who do not have a dementia diagnosis will have naccprad = 0, as will subjects with dementia but with another primary diagnosis. |

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| 19. | Variable name | naccaged |
| | Short descriptor | Age of onset of cognitive decline (years) |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 15 – 110<br>999 = Age of decline unknown<br>888 = N/A — no decline indicated<br>–8 = Value varies over visits; consult with NACC if you need help deciding which value to use |

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|---|---|---|
| | Description/derivation | **UDS subjects:** This variable provides the age in years at which the subject began experiencing cognitive decline. The value for this variable is determined by the clinician after consulting with medical records, direct observation, and subject/informant report. Due to the way Form B9 was designed, it was possible for Centers to provide a different value for age of cognitive decline at different UDS visits (these subjects have been flagged with naccaged = –8). As such, Centers are currently examining the age of onset of decline data to provide NACC with a single value for each subject's age of onset of cognitive decline. In the meantime, NACC suggests that you use caution and examine how many subjects in your analytic sample have naccaged = –8 values. In the case that a valid value for decage is followed by a code of Unknown (999) or N/A (888), the valid value is used. When the clinician does not report decline at any visit, the subject receives a value of N/A (888). Please contact NACC for further guidance if needed.<br><br>**MDS subjects:** This variable was not collected for MDS subjects. However, please see the MDS agedem variable for the age at which the subject developed dementia symptoms.<br><br>**NOTE:** The agedem and naccaged variables do not capture the same information. Please consult NACCs MDS and UDS Coding Guidebooks and contact NACC for further guidance if needed. |

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| 20. | Variable name | **naccdied** |
| | Short descriptor | Subject is known to be deceased |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = Not Deceased/Unknown<br>1 = Deceased |
| | Description/derivation | **UDS subjects:** Subjects with a Neuropathology Form and/or a Milestones Form reporting deceased = 1 are indicated as deceased (naccdied = 1). Otherwise, naccdied = 0.<br><br>**NOTE:** This variable includes subjects who were not under active follow-up at an ADC at the time of their death.<br><br>**MDS subjects:** Subjects with a Neuropathology form and/or vitalst = 2 are indicated as deceased (naccdied = 1). Otherwise, naccdied = 0. |

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| 21. | Variable name | **naccapoe** |
| | Short descriptor | APOE genotype |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 1 = e3,e3<br>2 = e3,e4<br>3 = e3,e2<br>4 = e4,e4<br>5 = e4,e2<br>6 = e2,e2<br>9 = missing/unknown/not assessed |
| | Description/derivation | **UDS and MDS subjects:** APOE genotype is reported by the Centers on the Neuropathology Form and sent directly to NACC. APOE genotype is also reported from the Alzheimer's Disease Genetics Consortium (ADGC). In the rare case that the Center-reported genotype and the genotype reported by the ADGC are not the same, the genotype is set to missing for that subject. The code for APOE genotype is the same as npapoe on the Neuropathology Form. |

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| 22. | Variable name | **naccne4s** |
| | Short descriptor | Number of APOE e4 alleles |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = no e4 allele<br>1 = 1 copy of e4 allele<br>2 = 2 copies of e4 allele<br>9 = missing/unknown/not assessed |
| | Description/derivation | **UDS and MDS subjects:** APOE genotype is reported by the Centers on the Neuropathology Form and sent to NACC. APOE genotype is also reported by the Alzheimer's Disease Genetics Consortium (ADGC). In the rare case that the Center-reported genotype and the genotype reported by the ADGC are not the same, the genotype is set to missing for that subject. We used the code for APOE genotype (same as npapoe on the Neuropathology Form) to create a new variable indicating the number of e4 alleles. |

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| 23. | Variable name | **naccadgc** |
| | Short descriptor | Indicator of whether or not genotype data is available at ADGC |
| | Data type | Numeric cross-sectional |
| | Allowable codes | 0 = Not available<br>1 = Available |
| | Description/derivation | **UDS and MDS subjects:** Genotype data is available from the Alzheimer's Disease Genetics Consortium (ADGC). The actual genotype data is only available through the ADGC, which requires a formal proposal and application before the data are distributed. |

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| 24a. | Variable name | **naccacei** |
| | Short descriptor | Reported current use of an angiotensin converting enzyme (ACE) inhibitor |
| | Data type | Numeric longitudinal |
| | Allowable codes | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| | Description/derivation | **UDS subjects:** This variable indicates reported current use of an ACE inhibitor. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| captopril | Capoten, Captopril |
| enalapril | Enalapril Maleate, Enalaprilat, Vasotec |
| fosinopril | Fosinopril Sodium, Monopril |
| quinapril | Accupril, Quinapril Hydrochloride |
| ramipril | Altace, Ramipril |
| benazepril | Lotensin, Benazepril Hydrochloride |
| lisinopril | Lisinopril, Prinivil, Zestril |
| moexipril | Univasc, Moexipril Hydrochloride |
| trandolapril | Mavik, Trandolapril |
| perindopril | Aceon, Perindopril Erbumine |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

| 24b. | | |
|---|---|---|
| | **Variable name** | **naccaaas** |
| | **Short descriptor** | Reported current use of an antiadrenergic agent |
| | **Data type** | Numeric longitudinal |
| | **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| | **Description/derivation** | **UDS subjects:** This variable indicates reported current use of an antiadrenergic agent, including both peripherally and centrally acting antiadrenergic agents. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| guanethidine | Ismelin |
| prazosin | Minipress, Prazosin Hydrochloride |
| reserpine | Reserpine |
| terazosin | Hytrin, Terazosin Hydrochloride |
| guanadrel | Hylorel |
| doxazosin | Cardura, Cardura XL, Doxazosin Mesylate |
| mecamylamine | Inversine |
| rauwolfia serpentina | Rauwolfemms, Rauwolfia 1X, Rauwolfia Serpentina |
| deserpidine | Harmonyl |
| tamsulosin | Flomax, Tamsulosin Hydrochloride |
| alfuzosin | Uroxatral, Alfuzosin Hydrochloride |
| silodosin | Rapaflo |
| dutasteride-tamsulosin | Jalyn |
| cloNIDine | Catapres, Catapres-TTS1-3, CloNIDine Hydrochloride, CloNIDine TTS1-3, Duraclon, Kapvay, Nexiclon XR |
| guanabenz | Wytensin, Guanabenz Acetate |
| methyldopa | Aldomet, Aldomet Ester Hydrochloride, Methyldopa, Methyldopate |
| guanFACINE | Intuniv, GuanFACINE Hydrochloride, Tenex |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

| 24c. | | |
|---|---|---|
| | **Variable name** | **naccbeta** |
| | **Short descriptor** | Reported current use of a beta-adrenergic blocking agent (Beta-Blocker) |
| | **Data type** | Numeric longitudinal |
| | **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| | **Description/derivation** | **UDS subjects:** This variable indicates reported current use of a beta-blocker medication, including both cardioselective and non-cardioselective beta-blockers. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| atenolol | Atenolol, Senormin, Tenormin |
| acebutolol | Acebutolol Hydrochloride |
| metoprolol | Lopressor, Metoprolol Succinate ER, Metoprolol Tartrate, Toprol-XL |
| betaxolol | Betaxolol Hydrochloride, Kerlone |
| esmolol | Brevibloc |
| bisoprolol | Zebeta, Bisoprolol Fumarate |
| nebivolol | Bystolic |
| labetalol | Normodyne, Trandate, Labetalol Hydrochloride |
| nadolol | Corgard, Nadolol |
| propranolol | Inderal |
| pindolol | Pindolol, Visken |
| timolol | Blocadren, Timolol Maleate |
| penbutolol | Levatol |
| sotalol | Betapace |
| carteolol | Cartrol |
| carvedilol | Carvedilol, Coreg, Coreg CR |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

24d.

**Variable name** naccccbs

**Short descriptor** Reported current use of a calcium channel blocking agent

**Data type** Numeric longitudinal

**Allowable codes**

0 = Did not report use at visit
1 = Reported use at visit
9 = Did not complete medications form

**Description/derivation**

**UDS subjects:** This variable indicates reported current use of a calcium channel blocking medication. The following medications are included in this category:

| Drug name | Example brand names |
|---|---|
| diltiazem | Cardizem |
| verapamil | Calan |
| NIFEdipine | Adalat, Adalat CC, Afeditab CR, NIFEdipine ER, Nifediac CC, Nifedical XL, Nifedipine, Procardia, Procardia XL |
| felodipine | Plendil, Felodipine ER |
| isradipine | Dynacirc, Dynacirc CR, Isradipine |
| niCARdipine | Cardene, Cardene IV, Cardene SR, NiCARdipine Hydrochloride |
| niMODipine | NiMODipine, Nimotop |
| bepridil | Vascor |
| amLODIPine | Norvasc, AmLODIPine Besylate |
| nisoldipine | Nisoldipine, Sular |
| mibefradil | Posicor |
| clevidipine | Cleviprex |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

24e.

| | |
|---|---|
| **Variable name** | **naccdiur** |
| **Short descriptor** | Reported current use of a diuretic |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| **Description/derivation** | **UDS subjects:** This variable indicates reported current use of a diuretic medication and includes loop diuretics, potassium-sparing diuretics, thiazide and thiazide-like diuretics, carbonic anhydrase inhibitors, and miscellaneous diuretics. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| furosemide | Lasix, Diaqua-2, Furosemide, Lo-Aqua |
| bumetanide | Bumex, Bumetanide |
| ethacrynic acid | Edecrin, Edecrin Sodium |
| torsemide | Demadex, Demadex I.V., Torsemide |
| aMILoride | AMILoride Hydrochloride, AMILoride Hydrochloride Dihydrate, Midamor |
| spironolactone | Aldactone |
| triamterene | Dyrenium, Triamterene |
| chlorothiazide | Chlorothiazide, Chlorothiazide Sodium, Diuril, Diuril Sodium, Chlorthalidone, Hygroton, Thalitone |
| hydrochlorothiazide | Aquazide H, Carozide, Diaqua, Esidrix, Ezide, Hydro Par, HydroDIURIL, Hydrochlorothiazide, Loqua, Microzide, Oretic |
| indapamide | Lozol, Indapamide |
| metolazone | Metolazone, Mykrox, Zaroxolyn |
| bendroflumethiazide | Bendroflumethiazide, Naturetin-10, Naturetin-5 |
| methyclothiazide | Aquatensen, Enduron, Methyclothiazide |
| benzthiazide | Exna |
| hydroflumethiazide | Diucardin, Saluron |
| trichlormethiazide | Aquacot, Diurese, Metahydrin, Naqua, Trichlormethiazide |
| polythiazide | Renese |
| acetaZOLAMIDE | AcetaZOLAMIDE |
| dichlorphenamide | Daranide |
| methazolamide | Glauctabs, MZM, Methazolamide, Neptazane |
| mannitol | Aridol, Mannitol, Osmitrol |
| pamabrom | Aqua-Ban, Aqua-Ban with Pamabrom, Diurex Aquagels, Diurex Water Capsules |
| urea | Ureaphil |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

24f.

| | |
|---|---|
| **Variable name** | **naccvasd** |
| **Short descriptor** | Reported current use of a vasodilator |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |

**Description/derivation**

**UDS subjects:** This variable indicates reported current use of a vasodilator. The following medications are included in this category:

| Drug name | Example brand names |
|---|---|
| hydrALAZINE | Apresoline, HydrALAZINE Hydrochloride |
| minoxidil | Loniten, Minoxidil |
| nitroprusside | Sodium Nitroprusside |
| nitroglycerin | Minitran, Nitrek, Nitro TD Patch-A, Nitro-Bid, Nitro-Bid IV, Nitro-Dur, Nitro-Par, Nitro-Time, Nitrocot, Nitrodisc, Nitrogard, Nitroglycerin, Nitroglycerin ER, Nitroglycerin Patch, NitroglycerinTransdermal System, Nitroglyn E-R, Nitrol, Nitrol Appli-Kit, Nitrolingual, Nitrolingual Duo Pack, Nitromist, Nitrong, Nitroquick, Nitrostat, Transderm-Nitro, Tridil |
| alprostadil | Alprostadil |
| nesiritide | Natrecor |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

24g.

**Variable name** nacchtnc

**Short descriptor** Reported current use of an antihypertensive combination therapy

**Data type** Numeric longitudinal

**Allowable codes**

0 = Did not report use at visit
1 = Reported use at visit
9 = Did not complete medications form

**Description/derivation**

**UDS subjects:** This variable indicates reported current use of an antihypertensive combination medication. The following medications are included in this category:

| Drug name | Example brand names |
|---|---|
| hydrochlorothiazide-triamterene | Dyazide, Hydrochlorothiazide-Triamterene, Maxzide, Maxzide-25 |
| aMILoride-hydrochlorothiazide | Moduretic 5-50, AMILoride HCl-Hydrochlorothiazide |
| hydrochlorothiazide-spironolactone | Aldactazide, Hydrochlorothiazide-Spironolactone, Spironolactone Plus |
| polythiazide-reserpine | Renese-R, Demi-Regroton, Regroton |
| chlorothiazide-reserpine | Chlorothiazide-Reserpine, Diupres-250, Diupres-500 |
| hydrochlorothiazide-reserpine | Hydro-Reserp, Hydrochlorothiazide-Reserpine, Hydropres-25, Hydropres-50, Hydroserp, Hydroserpine, Hydroserpine #1, Salutensin, Mallopress, Salutensin-Demi |
| methyclothiazide-reserpine | Diutensen-R |
| reserpine-trichlormethiazide | Metatensin #2, Metatensin #4 |
| bendroflumethiazide-rauwolfia serpentina | Bendroflumethiazide-Rauwolfia Serp, Flumezide, Rauzide, Rondameth |
| hydrALAZINE/hydrochlorothiazide/ reserpine | Diuretic Ap-Es, HHR, HydrALAZINE HCl/ Hydrochlorothiazid, Hydrap-ES, Marpres, Ser-Ap-Es, Serathide, Serpazide, Serpex, Tri-Hydroserpine, Uni Serp, Unipres |

| | |
|---|---|
| hydrALAZINE-hydrochlorothiazide | Apresazide, HydrALAZINE HCl-Hydrochlorothiazid, HydrALAZINE Plus, Hydra-Zide |
| atenolol-chlorthalidone | Atenolol-Chlorthalidone, Tenoretic 100, Tenoretic 50 |
| bendroflumethiazide-nadolol | Bendroflumethiazide-Nadolol, Corzide 40/5, Corzide 80/5 |
| hydrochlorothiazide-timolol | Timolide 10-25 |
| hydrochlorothiazide-propranolol | Hydrochlorothiazide-Propranolol, Inderide, Inderide :A |
| hydrochlorothiazide-methyldopa | Aldoril 15, Aldoril 25, Aldoril D30, Aldoril D50, Hydrochlorothiazide-Methyldopa, Hydrochlorothiazide-Metoprolol, Lopressor HCT |
| benazepril-hydrochlorothiazide | Lotensin HCT, Benazepril-Hydrochlorothiazide |
| hydrochlorothiazide-lisinopril | Prinzide, Zestoretic, Hydrochlorothiazide-Lisinopril |
| chlorthalidone-cloNIDine | Chlorthalidone-CloNIDine, Clorpres, Combipres |
| polythiazide-prazosin | Minizide |
| guanethidine-hydrochlorothiazide | Esimil |
| deserpidine-methyclothiazide | Enduronyl, Enduronyl Forte |
| deserpidine-hydrochlorothiazide | Oreticyl 25, Oreticyl 50, Oreticyl Forte |
| captopril-hydrochlorothiazide | Capozide 25/15, Capozide 25/25, Capozide 50/15, Capozide 50/25, Captopril-Hydrochlorothiazide |
| enalapril-hydrochlorothiazide | Enalapril-Hydrochlorothiazide, Vaseretic 10-25, Vaseretic 5-12.5 |
| bisoprolol-hydrochlorothiazide | Ziac, Bisoprolol-Hydrochlorothiazide |
| chlorothiazide-methyldopa | Aldoclor-150, Aldoclor-250, Chlorothiazide-Methyldopa |
| amLODIPine-benazepril | Lotrel, AmLODIPine Besylate-Benazepril Hyd |
| hydrochlorothiazide-losartan | Hyzaar, Hydrochlorothiazide-Losartan |
| diltiazem-enalapril | Teczem |
| trandolapril-verapamil | Tarka, Trandolapril-Verapamil Hydrochlori |
| enalapril-felodipine | Lexxel |
| hydrochlorothiazide-moexipril | Uniretic, Hydrochlorothiazide-Moexipril Hydr |
| hydrochlorothiazide-irbesartan | Avalide |
| hydrochlorothiazide-valsartan | Diovan HCT |
| hydrochlorothiazide-quinapril | Accuretic, Quinaretic, Hydrochlorothiazide-Quinapril Hydr |
| fosinopril-hydrochlorothiazide | Fosinopril-Hydrochlorothiazide, Monopril HCT |
| candesartan-hydrochlorothiazide | Atacand HCT |
| hydrochlorothiazide-telmisartan | Micardis HCT |
| eprosartan-hydrochlorothiazide | Teveten HCT |
| hydrochlorothiazide-olmesartan | Benicar HCT |
| amLODIPine-atorvastatin | Amlodipine Besylate-Atorvastatin |
| hydrALAZINE-isosorbide dinitrate | BiDil |
| amLODIPine-valsartan | Exforge |
| amLODIPine-olmesartan | Azor |
| aliskiren-hydrochlorothiazide | Tekturna HCT |
| amLODIPine/hydrochlorothiazide/valsartan | Exforge HCT |
| aliskiren-valsartan | Valturna |

| | |
|---|---|
| amLODIPine-telmisartan | Twynsta |
| amLODIPine/hydrochlorothiazide/ olmesartan | Tribenzor |
| aliskiren-amLODIPine | Tekamlo |
| aliskiren/amLODIPine/hydrochlorothiazide | Amturnide |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

24h.

**Variable name** **naccangi**

**Short descriptor** Reported current use of an angiotensin II inhibitor

**Data type** Numeric longitudinal

**Allowable codes**
0 = Did not report use at visit
1 = Reported use at visit
9 = Did not complete medications form

**Description/derivation**

**UDS subjects:** This variable indicates reported current use of an angiotensin II inhibitor. The following medications are included in this category:

| Drug name | Example brand names |
|---|---|
| losartan | Cozaar, Losartan Potassium |
| valsartan | Diovan |
| irbesartan | Avapro |
| eprosartan | Teveten |
| candesartan | Atacand |
| telmisartan | Micardis |
| olmesartan | Benicar |
| azilsartan | Edarbi |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

25.

**Variable name** **nacclipl**

**Short descriptor** Reported current use of lipid lowering medication

**Data type** Numeric longitudinal

**Allowable codes**
0 = Did not report use at visit
1 = Reported use at visit
9 = Did not complete medications form

**Description/derivation**

**UDS subjects:** This variable indicates reported current use of a prescription antihyperlipidemic (lipid lowering) medication, including HMG-COA reductase inhibitors, miscellaneous antihyperlipidemic agents, fibric acid derivatives, bile acid sequestrants, cholesterol absorption inhibitors, and antihyperlipidemic combination therapies. The following medications are included in this category:

| Drug name | Example brand names |
|---|---|
| lovastatin | Altoprev, Altocor, Lovastatin, Mevacor |
| pravastatin | Pravachol, Pravastatin Sodium |
| simvastatin | Zocor, Simvastatin |
| fluvastatin | Lescol, Lescol XL |
| atorvastatin | Lipitor, Atorvastatin Calcium |
| cerivastatin | Baycol |
| red yeast rice | Cholestin (obsolete) |
| rosuvastatin | Crestor |
| pitavastatin | Livalo |
| niacin | B3-500-Gr, Niacin, Niacin ER, Niacin SR, Niacin TD, Niacor, Niacor B3, Niaspan ER, Niaspan ER Starter Pack, Nico-400, Nicobid Tempules, Nicolar, Nicotinex, Nicotinic Acid, Slo-Niacin |
| probucol | Lorelco |
| dextrothyroxine sodium | Choloxin |
| clofibrate | Atromid-S, Clofibrate |
| gemfibrozil | Gemcor, Gemfibrozil, Lopid |
| fenofibrate | Antara, Fenofibrate, Fenofibrate Micronized, Fenoglide, Lipofen, Lofibra, TriCor, Triglide |
| fenofibric acid | Fenofibric Acid, Fibricor, Trilipix |
| cholestyramine | Cholestyramine, Cholestyramine Light, Cholestyramine Light Packets, Cholestyramine Packets, Locholest, Locholest Light, Locholest Light Packets, Locholest Packets, Prevalite, Prevalite Packets, Questran, Questran Light, Questran Light Packets, Questran Packets |
| colestipol | Colestid, Colestid Flavored, Colestipol Hydrochloride, |
| colesevelam | Welchol |
| ezetimibe | Zetia |
| lovastatin-niacin | Advicor |
| aspirin-pravastatin | Pravigard Pac |
| amLODIPine-atorvastatin | Caduet |
| ezetimibe-simvastatin | Vytorin |
| niacin-simvastatin | Simcor |
| simvastatin-sitaGLIPtin | Juvisync |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

26.

| | |
|---|---|
| **Variable name** | **naccnsd** |
| **Short descriptor** | Reported current use of nonsteroidal anti-inflammatory medication |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| **Description/derivation** | **UDS subjects:** This variable indicates reported current use of a nonsteroidal anti-inflammatory medication. Medications included in this category include non-steroidal |

anti-inflammatory agents, salicylates, COX2 inhibitors, and analgesic combinations containing one of the latter. The following medications are included in this category:

| Drug name | Example brand names |
|---|---|
| ibuprofen | Advanced Pain Relief, Advil, Advil Childrens, Advil Junior Strength, Advil Junior Strength, Advil Liquigel, Advil Migraine, Advil Pediatric, Arthritis Foundation IB, Caldolor, Cap-Profen, Childrens Ibuprofen Berry, Childrens Ibuprofen, Dolgesic, Genpril, Haltran, IBU, IBU-200, Ibifon 600, Ibren, Ibu-4, Ibu-6, Ibu-8, Ibu-Tab, Ibuprofen, Ibuprofen Childrens, Ibuprofen Dye Free, Ibuprofen IB, Ibuprofen Infants Drops, Ibuprofen PMR, Ibuprofen to Go, Ibuprohm, Menadol, Midol IB, Midol Maximum Strength Cramp Formula, Motrin, Motrin Childrens, Motrin IB, Motrin Infant Drops, Motrin Junior Strength, Motrin Migraine Pain, Motrin Pediatric, NeoProfen, Nuprin, Pediacare Fever, Q-Profen, Rufen, Saleto-200, Saleto-400, Saleto-600, Saleto-800, Sup Pain Med, Tab-Profen, Uni-Pro, Wal-Profen |
| naproxen | Aflaxen, Aleve, Aleve Caplet, Aleve Easy Open Arthritis, Aleve Gelcap, All Day Pain Relief, Anaprox, Anaprox-DS, Comfort Pac with Naproxen, EC-Naprosyn, Leader Naproxen Sodium, Midol Extended Relief, Naprelan 375, Naprelan 500, Naprelan 750, Naprelan Dose Card, Naprosyn, Naproxen, Naproxen Enteric Coated, Naproxen Sodium, Naproxen Sodium DS, Wal-Proxen, Wal-Proxen Caplets |
| fenoprofen | Nalfon, Fenoprofen Calcium, Fenoprofen Calcium Anhydrous |
| ketoprofen | Actron, Ketoprofen, Ketoprofen ER, Orudis, Orudis KT, Oruvail |
| sulindac | Clinoril, Sulindac |
| indomethacin | Indocin, Indocin SR, Indomethacin, Indomethacin SR, Indomethacin Sodium Trihydrate |
| tolmetin | Tolectin, Tolectin 600, Tolectin DS, Tolmetin Sodium |
| flurbiprofen | Ansaid, Flurbiprofen |
| ketorolac | Ketorolac Tromethamine, Sprix, Toradol, Toradol IM, Toradol IV/IM |
| meclofenamate | Meclofenamate Sodium, Meclomen |
| mefenamic acid | Mefenamic Acid, Ponstel |
| nabumetone | Nabumetone, Relafen |
| piroxicam | Feldene, Piroxicam |
| diclofenac | Cambia, Cataflam, Diclofenac Potassium, Diclofenac Sodium, Diclofenac Sodium XR, Voltaren, Voltaren-XR, Zipsor |
| etodolac | Etodolac, Etodolac ER, Lodine, Lodine XL |
| oxaprozin | Daypro, Oxaprozin |
| bromfenac | DurAct |
| diclofenac-misoprostol | Arthrotec |
| meloxicam | Meloxicam, Mobic |
| lansoprazole-naproxen | PREVACID NapraPAC 375, PREVACID NapraPAC 500 |
| esomeprazole-naproxen | Vimovo |
| famotidine-ibuprofen | Duexis |

| | |
|---|---|
| aspirin | Acetylsalicylic Acid, Acuprin 81, Arthritis Foundation Aspirin, Arthritis Pain, Arthritis Pain, Ascriptin Enteric, Aspergum Cherry, Aspergum Orginal, Aspir 81, Aspir-Low, Aspir-trin, Aspirin, Aspirin Adult Low Strength, Aspirin Child Chewable, Aspirin Childrens Cherry, Aspirin Childrens Orange, Aspirin EC Lo-Dose, Aspirin Enteric Coated, Aspirin Lite Coat, Aspirin Litecoat, Aspirin Low Dose, Aspirin Low Strength, Aspirin Tri-Buffered, Aspirin, Extended Release, Aspirin-Antacid, Aspirtab, Bayer Aspirin, Bayer Aspirin Regimen, Bayer Aspirin Sugar Free, Bayer Aspirin with Calcium, Bayer Aspirin with Heart Advantage, Bayer Childrens Aspirin, Bayer Low Dose, Bayer Low Strength, Bayer Plus, Buffered Aspirin, Bufferin, Bufferin Arthritis Strength, Bufferin Extra Strength, Bufferin Low Dose, Buffex, CTD Aspirin, Coated Aspirin, Easprin, Ecotrin, Ecotrin Adult Low Strength, Ecotrin Maximum Strength, Ecpirin, Empirin, Entaprin, Entercote, Extra Strength Bayer, Fasprin, Genacote, Gennin-FC, Genprin, Halfprin, Litecoat Aspirin, Low Dose ASA, Med Aspirin, Minitabs, Norwich Aspirin, Ridiprin, Sloprin, St. Joseph Aspirin, St. Joseph Aspirin Adult Chewable, St. Joseph Aspirin Adult EC, Stanback Analgesic, Tri-Buffered Aspirin, Uni-Buff, Uni-Tren, Valomag, YSP Aspirin, Zero-Order Release, Zorprin |
| diflunisal | Diflunisal, Dolobid |
| choline salicylate | Arthropan |
| salsalate | Amigesic, Anaflex, Argesic-SA, Disalcid, Marthritic, Mono-Gesic, Salflex, Salsalate, Salsitab |
| sodium salicylate | Sodium Salicylate |
| sodium thiosalicylate | Rexolate, Sodium Thiosalicylate, Tusal |
| magnesium salicylate | Backache Relief Extra Strength, Bayer Select Backache Pain Formula, Doans Pills, Doans Pills Extra Strength, MST, Magan, Magnesium Salicylate, Mobidin, Novasal, Nuprin Backache Caplet |
| choline salicylate-magnesium salicylate | CMT, Choline Magnesium Trisalicylate, Tricosal, Trilisate |
| ASA/citric acid/Na bicarb | Alka-Seltzer, Alka-Seltzer Blue, Alka-Seltzer Extra Strength, Alka-Seltzer Flavored, Effervescent Pain & Antacid, Effervescent Pain Relief, Pain Relief (Effervescent) |
| Al hydroxide/ASA/Ca carbonate/ Mg hydroxide | Arthritis Pain Formula, Ascriptin, Ascriptin Maximum Strength, Aspidrox, Aspir-Mox, Aspir-Mox IB, Aspirin Buffered, Aspirin Plus Antacid Extra Strength, Magnaprin |
| celecoxib | CeleBREX |
| rofecoxib | Vioxx |
| valdecoxib | Bextra |
| APAP/ASA/caffeine/salicylamide | Levacet, Saleto |
| APAP/ASA/caffeine | Excedrin, Excedrin Express Gels, Excedrin Extra Strength, Excedrin Extra Strength Geltab, Excedrin Geltab, Excedrin Menstrual Express Gels, Excedrin Migraine, Excedrin Migraine Geltab, Ex-Pain, Genace, Acetaminophen/Aspirin/ Caffeine, Anacin Advanced Headache Formula, Goodys Headache Powders, Goodys Extra Strength, Headache Relief, Migraine Formula, Pain Reliever Added Strength, Pain Reliever Plus, Pamprin Max, Supac, Uni-Case |
| APAP/Al hydroxide/ASA/caffeine/ Mg hydroxide | Vanquish |
| ASA/caffeine/salicylamide | B.C. Powder, B.C. Powder Arthritis Strength, B.C. Headache, Emagrin |
| aspirin-meprobamate | Equagesic |

| | |
|---|---|
| aspirin-caffeine | AA&C, Adult Pain, Adult Strength, Alka-Seltzer Morning Relief, Anacin, Anacin Extra Strength, Analgesic Pain Reliever, Aspircaf, Aspirin-Caffeine, CP-2, Cope, Genasan, Major-Cin, P-A-C Analgesic, Pain Relief with Aspirin, Q-Acin, Uni-Ann |
| aspirin-phenyltoloxamine | Momentum |
| magnesium salicylate-phenyltoloxamine | Mag-Phen, Magsal, Mobigesic, Tetra-Mag |
| ASA/butalbital/caffeine | Aspirin/Butalbital/Caffeine, Butalbital Compound, Fiorinal, Fiormor, Fiortal, Fortabs, Idenal, Isollyl, Laniroif |
| aspirin-butalbital | Axotal |
| aspirin-diphenhydrAMINE | Bayer Aspirin PM Extra Strength, Bayer NightTime Relief |
| diphenhydrAMINE-magnesium salicylate | Doans PM |
| acetaminophen-salicylamide | Frenadol, Panritis Forte |
| APAP/caffeine/phenyltoloxamine/ salicylamide | Cafgesic |
| APAP/phenyltoloxamine/ salicylamide | Anabar, Be-Flex Plus, By-Ache, Dolorex, Ed-Flex, Lobac |
| APAP/caffeine/mg salicylate/ phenyltoloxamin | Cafgesic Forte, Combiflex ES, Durabac Forte |
| diphenhydrAMINE-ibuprofen | Advil PM, Advil PM Liqui-Gels, Ibuprofen PM, Motrin PM |
| APAP/caffeine/magnesium salicylate | KneeRelief |
| acetaminophen-aspirin | Excedrin Back & Body |
| caffeine-magnesium salicylate | Diurex |
| APAP/magnesium salicylate/ pamabrom | Pamprin Cramp Formula |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

27.

| | |
|---|---|
| **Variable name** | **naccac** |
| **Short descriptor** | Reported current use of an anticoagulant or antiplatelet agent |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| **Description/derivation** | **UDS subjects:** This variable indicates reported current use of an anti-clotting or blood-thinning medication, including heparins, coumarins and indandiones, thrombin inhibitors, factor Xa inhibitors, platelet aggregation inhibitors, and glycoprotein platelet inhibitors. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| heparin | Dextrose-Heparin Sodium, Heparin Sodium, Heparin Sodium (beef), Heparin Sodium ADD-Vantage, Heparin Sodium Preservative Free, Heparin Sodium-Sodium Chloride |
| enoxaparin | Lovenox, Enoxaparin Sodium |
| dalteparin | Fragmin |

| | |
|---|---|
| danaparoid | Orgaran |
| ardeparin | Normiflo |
| tinzaparin | Innohep |
| heparin flush | Hep-Lock, Hep-Pak, Hep-Pak CVC, Heparin (Preservative Free) in Sod, Heparin Lock Flush, Heparin Sodium in Sodium Chloride, Lok-Pak Needleless Kit, Lok-Pak-N, Monoject Prefill Advanced, PosiFlush |
| warfarin | Coumadin, Jantoven, Warfarin Sodium |
| anisindione | Miradon |
| dicumarol | Dicumarol |
| lepirudin | Refludan |
| argatroban | Acova, Argatroban |
| bivalirudin | Angiomax |
| desirudin | Iprivask |
| dabigatran | Pradaxa |
| fondaparinux | Arixtra, Fondaparinux Sodium |
| rivaroxaban | Xarelto |
| aspirin | Acetylsalicylic Acid, Acuprin 81, Arthritis Foundation Aspirin, Arthritis Pain, Arthritis Pain, Ascriptin Enteric, Aspergum Cherry, Aspergum Orginal, Aspir 81, Aspir-Low, Aspir-trin, Aspirin, Aspirin Adult Low Strength, Aspirin Child Chewable, Aspirin Childrens Cherry, Aspirin Childrens Orange, Aspirin EC Lo-Dose, Aspirin Enteric Coated, Aspirin Lite Coat, Aspirin Litecoat, Aspirin Low Dose, Aspirin Low Strength, Aspirin Tri-Buffered, Aspirin, Extended Release, Aspirin-Antacid, Aspirtab, Bayer Aspirin, Bayer Aspirin Regimen, Bayer Aspirin Sugar Free, Bayer Aspirin with Calcium, Bayer Aspirin with Heart Advantage, Bayer Childrens Aspirin, Bayer Low Dose, Bayer Low Strength, Bayer Plus, Buffered Aspirin, Bufferin, Bufferin Arthritis Strength, Bufferin Extra Strength, Bufferin Low Dose, Buffex, CTD Aspirin, Coated Aspirin, Easprin, Ecotrin, Ecotrin Adult Low Strength, Ecotrin Maximum Strength, Ecpirin, Empirin, Entaprin, Entercote, Extra Strength Bayer, Fasprin, Genacote, Gennin-FC, Genprin, Halfprin, Litecoat Aspirin, Low Dose ASA, Med Aspirin, Minitabs, Norwich Aspirin, Ridiprin, Sloprin, St. Joseph Aspirin, St. Joseph Aspirin Adult Chewable, St. Joseph Aspirin Adult EC, Stanback Analgesic, Tri-Buffered Aspirin, Uni-Buff, Uni-Tren, Valomag, YSP Aspirin, Zero-Order Release, Zorprin |
| dipyridamole | Dipyridamole |
| ticlopidine | Ticlid, Ticlopidine Hydrochloride |
| clopidogrel | Clopidogrel, Plavix |
| cilostazol | Pletal |
| aspirin-dipyridamole | Aggrenox |
| aspirin-pravastatin | Pravigard Pac |
| prasugrel | Effient |
| aspirin-calcium carbonate | Bayer Womens Low Dose Plus Calcium |
| ticagrelor | Brilinta |
| abciximab | Reopro |
| tirofiban | Aggrastat |
| eptifibatide | Integrilin |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

28.

| | |
|---|---|
| **Variable name** | **naccadep** |
| **Short descriptor** | Reported current use of an antidepressant |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| **Description/derivation** | **UDS subjects:** This variable indicates reported current use of a prescription antidepressant, including miscellaneous, SSRIs, tricylcic, MOI, phenylpiperazine, tetracyclic, and SSNRI antidepressants. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| buPROPion | Aplenzin |
| St. Johns wort | St. Johns Wort |
| 5-hydroxytryptophan | 5-HTP |
| vilazodone | Viibryd |
| FLUoxetine | FLUoxetine Hydrochloride, FLUoxetine Hydrochloride DR, PROzac, PROzac Weekly, Rapiflux, Sarafem, Selfemra |
| sertraline | Zoloft, Sertraline Hydrochloride |
| PARoxetine | Paxil, Paxil CR, Pexeva, PARoxetine Hydrochloride, PARoxetine Hydrochloride ER |
| fluvoxaMINE | FluvoxaMINE Maleate, Luvox, Luvox CR |
| citalopram | CeleXA, Citalopram Hydrobromide |
| escitalopram | Lexapro |
| nortriptyline | Aventyl HCl, Nortriptyline Hydrochloride, Pamelor |
| desipramine | Desipramine Hydrochloride, Norpramin |
| amitriptyline | Amitriptyline Hydrochloride, Elavil, Endep, Vanatrip |
| doxepin | Doxepin Hydrochloride, SINEquan, Silenor |
| imipramine | Imipramine Hydrochloride, Imipramine Pamoate, Tofranil, Tofranil-PM |
| trimipramine | Surmontil, Trimipramine Maleate |
| amoxapine | Asendin, Amoxapine |
| protriptyline | Vivactil, Protriptyline Hydrochloride |
| clomiPRAMINE | Anafranil, ClomiPRAMINE Hydrochloride |
| isocarboxazid | Marplan |
| phenelzine | Nardil, Phenelzine Sulfate |
| tranylcypromine | Parnate, Tranylcypromine Sulfate |
| selegiline | Atapryl |
| traZODone | Desyrel, Desyrel Dividose, Oleptro, TraZODone Hydrochloride |
| nefazodone | Serzone, Nefazodone Hydrochloride |
| maprotiline | Ludiomil, Maprotiline Hydrochloride |
| mirtazapine | Mirtazapine, Remeron, Remeron SolTab |
| venlafaxine | Effexor, Effexor XR, Venlafaxine Hydrochloride, Venlafaxine Hydrochloride ER |
| DULoxetine | Cymbalta |
| milnacipran | Savella |
| desvenlafaxine | Pristiq |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

29.

| | |
|---|---|
| **Variable name** | **naccapsy** |
| **Short descriptor** | Reported current use of an antipsychotic agent |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| **Description/derivation** | **UDS subjects:** This variable indicates reported current use of an antipsychotic agent, including miscellaneous antipsychotics, psychotherapeutic combinations, phenothiazine psychotics, thioxanthenes, and atypical antipsychotics. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| haloperidol | Haldol, Haldol Decanoate, Haloperidol, Haloperidol Decanoate, Haloperidol Lactate |
| lithium | Eskalith, Eskalith-CR, Lithium Carbonate, Lithium Citrate, Lithobid, Lithonate, Lithotabs |
| molindone | Moban |
| loxapine | Loxapine Succinate, Loxitane, Loxitane C, Loxitane IM |
| pimozide | Orap |
| amitriptyline-chlordiazePOXIDE | Amitriptyline-ChlordiazePOXIDE, Limbitrol, Limbitrol DS |
| amitriptyline-perphenazine | Duo-Vil 2-10, Duo-Vil 2-25, Duo-Vil 4-10, Etrafon 2-10, Etrafon 2-25, Etrafon Forte, Etrafon-A, Perphenazine-Amitriptyline, Triavil |
| FLUoxetine-OLANZapine | Symbyax, FLUoxetine-OLANZapine |
| chlorproMAZINE | Ormazine, Thorazine, Thorazine Spansule, ChlorproMAZINE Hydrochloride |
| fluPHENAZine | Permitil, Prolixin, FluPHENAZine Decanoate, FluPHENAZine Hydrochloride, Prolixin Decanoate, Prolixin Enanthate |
| prochlorperazine | Compro, Compazine Spansule, Prochlorperazine, Prochlorperazine Edisylate, Prochlorperazine Maleate, Procot |
| promazine | Sparine, Promazine Hydrochloride |
| thioridazine | Mellaril, Mellaril-S, Thioridazine Hydrochloride |
| methotrimeprazine | Levoprome |
| perphenazine | Trilafon |
| mesoridazine | Serentil |
| trifluoperazine | Stelazine, Trifluoperazine Hydrochloride |
| trifluprom azine | Vesprin |
| thiothixene | Navane, Thiothixene |
| cloZAPine | CloZAPine, Clozaril, FazaClo |
| risperiDONE | RisperDAL, RisperDAL Consta, RisperDAL M-Tab, RisperiDONE |
| OLANZapine | Olanzapine, ZyPREXA, ZyPREXA Relprevv, ZyPREXA Zydis |
| QUEtiapine | SEROquel, SEROquel XR |
| ziprasidone | Geodon |
| ARIPiprazole | Abilify, Abilify Discmelt |
| paliperidone | Invega, Invega Sustenna |

| | |
|---|---|
| iloperidone | Fanapt |
| asenapine | Saphris, Saphris Black Cherry |
| lurasidone | Latuda |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

30.

**Variable name** naccaanx

**Short descriptor** Reported current use of an anxiolytic, sedative, or hypnotic agent

**Data type** Numeric longitudinal

**Allowable codes**

0 = Did not report use at visit
1 = Reported use at visit
9 = Did not complete medications form

**Description/derivation**

**UDS subjects:** This variable indicates reported current use of an anxiolytic, sedative or hypnotic agent, including barbituates, benzodiazepines and miscellaneous anxiolytics, sedatives, and hypnotics. The following medications are included in this category:

| Drug name | Example brand names |
|---|---|
| amobarbital | Amobarbital Sodium, Amytal Sodium |
| PENTobarbital | Nembutal, Nembutal Sodium, PENTobarbital Sodium, Pentobarbital, Luminal |
| secobarbital | Secobarbital Sodium, Seconal Sodium |
| mephobarbital | Mebaral |
| butabarbital | Busodium, Butabarbital, Butisol Sodium |
| butalbital | Butalbital |
| amobarbital-secobarbital | Tuinal |
| oxazepam | Oxazepam, Serax |
| diazepam | Diastat, Diastat AcuDial, Diastat Pediatric, Valium, Valrelease, Zetran, Diazepam |
| LORazepam | Ativan |
| ALPRAZolam | Alprazolam, ALPRAZolam ER, Niravam, Xanax, Xanax XR |
| chlordiazePOXIDE | Libritabs, ChlordiazePOXIDE Hydrochloride, Librium, Mitran, Poxi |
| clonazePAM | ClonazePAM, Clorazepate Dipotassium, Gen-xene, Tranxene SD, Tranxene T-Tab |
| flurazepam | Dalmane, Flurazepam Hydrochloride, |
| midazolam | Midazolam, Midazolam Hydrochloride, Versed |
| temazepam | Restoril, Temazepam |
| triazolam | Halcion, Triazolam |
| halazepam | Paxipam |
| estazolam | Estazolam, Prosom |
| quazepam | Doral |
| chloral hydrate | Aquachloral Supprettes, Chloral Hydrate, Somnote |
| busPIRone | BuSpar, BuSpar Dividose, BusPIRone Hydrochloride, Vanspar |
| diphenhydrAMINE | DiphenhydrAMINE Hydrochloride |
| doxepin | Adapin |

| | |
|---|---|
| ethchlorvynol | Placidyl |
| meprobamate | Equanil, MB-TAB, Meprobamate, Miltown |
| pyrilamine | Pyrilamine Maleate |
| hydrOXYzine | Anx |
| chlormezanone | Trancopal |
| zolpidem | Ambien, Ambien CR, Edluar, Zolpidem Tartrate, Zolpidem Tartrate ER, Zolpimist |
| paraldehyde | Paral |
| acetylcarbromal | Paxarel |
| propiomazine | Largon |
| doxylamine | Aldex AN, Doxylamine Succinate, Nitetime, Nytol Maximum Strength, Sleep Aid (Doxylamine), Unisom |
| melatonin | Melatonin |
| zaleplon | Sonata, Zaleplon |
| dexmedetomidine | Precedex |
| sodium oxybate | Xyrem |
| eszopiclone | Lunesta |
| ramelteon | Rozerem |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

31.

| | |
|---|---|
| **Variable name** | **naccadmd** |
| **Short descriptor** | Reported current use of a FDA-approved medication for Alzheimer's disease symptoms |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| **Description/derivation** | **UDS subjects:** This variable indicates reported current use of a FDA-approved medication for Alzheimer's disease symptoms, including cholinesterase inhibitors and memantine. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| tacrine | Cognex |
| donepezil | Aricept, Aricept ODT, Donepezil Hydrochloride |
| rivastigmine | Exelon, Rivastigmine Tartrate |
| galantamine | Razadyne, Razadyne ER, Reminyl, Galantamine Hydrobromide, Galantamine Hydrobromide ER |
| memantine | Namenda |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

32.

| | |
|---|---|
| **Variable name** | **naccpdmd** |
| **Short descriptor** | Reported current use of an antiparkinson agent |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| **Description/derivation** | **UDS subjects:** This variable indicates reported current use of a Parkinsons disease medication, including anticholinergic and dopaminergic antiparkinson agents. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| benztropine | Cogentin, Benztropine Mesylate |
| diphenhydrAMINE | DiphenhydrAMINE Hydrochloride |
| procyclidine | Kemadrin |
| trihexyphenidyl | Artane, Trihexane, Trihexyphenidyl Hydrochloride |
| biperiden | Akineton HCl |
| amantadine | Symmetrel, Symadine |
| bromocriptine | Bromocriptine Mesylate |
| carbidopa | Carbidopa, Lodosyn |
| levodopa | Levodopa, Larodopa, Dopar |
| selegiline | Carbex, Eldepryl, Emsam, Selegiline Hydrochloride, Zelapar |
| pergolide | Permax, Pergolide Mesylate |
| carbidopa-levodopa | Atamet, Carbidopa-Levodopa, Carbidopa-Levodopa CR, Parcopa, Sinemet, Sinemet CR |
| cabergoline | Cabergoline |
| pramipexole | Mirapex, Mirapex ER, Pramipexole Dihydrochloride |
| rOPINIRole | Requip, Requip Starter Kit, Requip XL, ROPINIRole Hydrochloride |
| tolcapone | Tasmar |
| entacapone | Comtan |
| carbidopa/entacapone/ levodopa | Stalevo 50, Stalevo 75, Stalevo 100, Stalevo 125, Stalevo 150, Stalevo 200 |
| apomorphine | Apokyn, Apomorphine Hydrochloride |
| rasagiline | Azilect |
| rotigotine | Neupro |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

33.

| | |
|---|---|
| **Variable name** | **naccc1** |
| **Short descriptor** | Form date discrepancy between UDS Form A1 and Form C1 |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = UDS Form C1 completed within 90 days of Form A1<br>1 = UDS Form C1 completed >90 days before or after Form A1<br>9 = UDS Form C1 not completed |
| **Description/derivation** | **UDS subjects:** This variable flags any visit in which the Form C1 date (the date the neuropsychological test battery was conducted) is greater than 90 days before or after the Form A1 (Subject Demographics) date. For all UDS subjects, NACC uses the Form A1 date to determine the visit date (**visitmo**, **visitdy**, **visityr**).<br>**MDS subjects:** This variable is not available for MDS subjects it deals specifically with UDS forms. |

34.

| | |
|---|---|
| **Variable name** | **naccamd** |
| **Short descriptor** | Total number of medications reported at each visit |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0–40, 99 |
| **Description/derivation** | **UDS subjects:** This variable provides the total number of medications reported at a visit including all prescription and over the counter medications reported on UDS Form A4 at a single visit. If the medications form was not completed, then **naccnmd**=99.<br>**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS. |

35a.

| | |
|---|---|
| **Variable name** | **naccemd** |
| **Short descriptor** | Reported current use of estrogen hormone therapy |
| **Data type** | Numeric longitudinal |
| **Allowable codes** | 0 = Did not report use at visit<br>1 = Reported use at visit<br>9 = Did not complete medications form |
| **Description/derivation** | **UDS subjects:** This variable indicates the current use of an estrogen-alone hormone therapy, including estradiol, conjugated estrogens, and esterified estrogens. Topical preparations are not included. The following medications are included in this category: |

| Drug name | Example brand names |
|---|---|
| conjugated estrogens | Cenestin, Premarin |
| esterified estrogens | Menest |
| estradiol | Fempatch, Estrace |
| estropipate | Ogen, Ortho-Est |
| diethylstilbestrol | Stilphostrol |
| quinestrol | quinestrol |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

35b. **Variable name** **naccepmd**

**Short descriptor** Reported current use of estrogen + progestin hormone therapy

**Data type** Numeric longitudinal

**Allowable codes**
0 = Did not report use at visit
1 = Reported use at visit
9 = Did not complete medications form

**Description/derivation**

**UDS subjects:** This variable indicates the current use of an estrogen and progestin (or progesterone analog) combination hormone therapy. Topical preparations are not included. The following medications are included in this category:

| Drug name | Example brand names |
|---|---|
| drospirenone-estradiol | Angeliq |
| ethinyl estradiol-norethindrone | FemHrt |
| estradiol-norethindrone | Mimvey, Activella |
| estradiol-norgestimate | Prefest, Ortho-Prefest |
| conjugated estrogens- medroxyprogesterone | Premphase, Prempro |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

36. **Variable name** **naccdbmd**

**Short descriptor** Reported current use of a diabetes medication

**Data type** Numeric longitudinal

**Allowable codes**
0 = Did not report use at visit
1 = Reported use at visit
9 = Did not complete medications form

**Description/derivation**

**UDS subjects:** This variable indicates the current use of a diabetes medication, including insulin, sulfonylureas, biguanides, dipeptidyl peptidase 4 inhibitors, amylin analogs, incretin mimetics, and antidiabetic combinations. The following medications are included in this category:

| Drug name | Example brand names |
|---|---|
| chlorproPAMIDE | ChlorproPAMIDE, Diabinese |
| acetoHEXAMIDE | AcetoHEXAMIDE, Dymelor |
| glipiZIDE | GlipiZIDE, GlipiZIDE Extended Release, Glucotrol |
| glyBURIDE | DiaBeta, Glycron, Micronase |
| TOLAZamide | Tolazamide, Tolinase |
| TOLBUTamide | Orinase, Tol-Tab, Tolbutamide |
| glimepiride | Amaryl, Glimepiride |
| metFORMIN | Fortamet, Glucophage, MetFORMIN Hydrochloride, Riomet, Glumetza |
| insulin | insulin |
| insulin lispro protamine | insulin lispro protamine |
| insulin regular | HumuLIN R, HumuLIN R (Concentrated), Iletin Regular, Iletin II Regular Pork, Insulin Purified Regular Pork, NovoLIN R, NovoLIN R Innolet, NovoLIN R PenFill, Velosulin BR, ReliOn/NovoLIN R |

| | |
|---|---|
| insulin isophane | HumuLIN N, HumuLIN N Pen, Iletin II NPH Pork, Iletin NPH, Insulin Purified NPH Pork, NovoLIN N, NovoLIN N Innolet, NovoLIN N PenFill, Relion NovoLIN N |
| insulin zinc | HumuLIN L, Iletin II Lente Pork, Iletin Lente, Insulin Lente Pork, NovoLIN L |
| insulin zinc extended | HumuLIN U |
| insulin lispro | HumaLOG, HumaLOG Cartridge, HumaLOG KwikPen, HumaLOG Pen, Lispro PRC |
| insulin isophane-insulin regular | HumuLIN 50/50, HumuLIN 70/30, HumuLIN 70/30 Pen, Insulin Pork Mix, NovoLIN 70/30, NovoLIN 70/30 Innolet, NovoLIN 70/30 PenFill, ReliOn/NovoLIN 70/30, Relion NovoLIN 70/30 Innolet |
| insulin lispro-insulin lispro protamine | HumaLOG Mix 50/50, HumaLOG Mix 50/50 KwikPen, HumaLOG Mix 50/50 Pen, HumaLOG Mix 75/25, HumaLOG Mix 75/25 KwikPen, HumaLOG Mix 75/25 Pen |
| insulin glargine | Lantus, Lantus OptiClik Cartridge, Lantus Solostar Pen |
| insulin aspart | NovoLOG, NovoLOG FlexPen, NovoLOG PenFill |
| insulin aspart protamine | insulin aspart protamine |
| insulin aspart-insulin aspart protamine | NovoLOG Mix 70/30, NovoLOG Mix 70/30 FlexPen, NovoLOG Mix 70/30 PenFill |
| insulin glulisine | Apidra, Apidra OptiClik Cartridge, Apidra SoloStar Pen |
| insulin detemir | Levemir, Levemir FlexPen |
| insulin inhalation, rapid acting | EXUBERA, EXUBERA Combination Pack 12, EXUBERA Combination Pack 15, EXUBERA Kit |
| acarbose | Acarbose, Precose |
| miglitol | Glyset |
| troglitazone | Rezulin |
| rosiglitazone | Avandia |
| pioglitazone | Actos |
| repaglinide | Prandin |
| nateglinide | Nateglinide, Starlix |
| glyBURIDE-metFORMIN | Glucovance, Glyburide-Metformin |
| metFORMIN-rosiglitazone | Avandamet |
| glipiZIDE-metFORMIN | GlipiZIDE-Metformin, Metaglip |
| metFORMIN-pioglitazone | Actoplus Met, Actoplus Met XR |
| glimepiride-rosiglitazone | Avandaryl |
| glimepiride-pioglitazone | Duetact |
| metFORMIN-sitaGLIPtin | Janumet |
| metFORMIN-repaglinide | PrandiMet |
| metFORMIN-saxagliptin | Kombiglyze XR |
| simvastatin-sitaGLIPtin | Juvisync |
| sitaGLIPtin | Januvia |
| saxagliptin | Onglyza |
| linagliptin | Tradjenta |
| pramlintide | Symlin, SymlinPen 120, SymlinPen 60 |
| exenatide | Byetta Prefilled Pen |
| liraglutide | Victoza |

Medications variables were derived using Multum/Lexi-Comp© therapeutic drug categories.

**MDS subjects:** This variable is not available for MDS subjects as medication data were not collected before the introduction of the UDS.

| 37. | | |
|---|---|---|
| | **Variable name** | **naccdage** |
| | **Short descriptor** | Derived age at death |
| | **Data type** | Numeric cross-sectional |
| | **Allowable codes** | 15-120<br>888 = Not Applicable<br>999 = Unknown |
| | **Description/derivation** | **UDS subjects:** This variable is derived using data from both the Neuropathology (NP) and Milestones forms. For subjects for whom NP data is available, naccdage=NPDAGE. If NP data is not available, the date of death reported on the Milestones form is used. In the event that month of death is missing from the Milestones form, 7 (July) is imputed. In the event that day of death is missing from the Milestones form, 1 is imputed. Birth month and year are required elements in the UDS; however, birth day is not collected. To calculate naccdage, birth day is set to 1 for all subjects, and age at death is computed as death date – birth date.<br><br>For subjects reported as deceased, but missing year of death on the Milestones form, naccdage=999. For subjects who are not known to be deceased, naccdage=888. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br><br>**MDS subjects:** For MDS subjects for whom a NP form is available, naccdage=NPDAGE. If no NP form is available, naccdage is computed using MDS death date – birth date. If birth month or death month is missing, 7 (July) is imputed. If last known vital status is "Dead" (VITALST=2), and birth year or death year are missing, naccdage=999. |

| 38. | | |
|---|---|---|
| | **Variable name** | **naccint** |
| | **Short descriptor** | Time interval (days) between last visit and death |
| | **Data type** | Numeric cross-sectional |
| | **Allowable codes** | 0–5000<br>8888 = Not Applicable<br>9999 = Unknown |
| | **Description/derivation** | **UDS subjects:** This variable is the calculated time interval (days) between the date of the subject's last UDS visit (either telephone or in-person) and their date of death. Death date is taken from the NP form when available, and otherwise from the Milestones form. The interval is then computed as death date – last visit date. In the event that a subject is known to be deceased, but day or month of death is missing from the Milestones form, or are inconsistent with the last known visit date, naccint=9999. For subjects who are not known to be deceased, naccint=8888. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional.<br><br>**MDS subjects:** naccint is not calculated for MDS subjects because the MDS is not a longitudinal data set. |

| | | |
|---|---|---|
| 39. | Variable name | **nacchiv** |
| | Short descriptor | HIV+ write-in on Form D1 |
| | Data type | Numeric longitudinal |
| | Allowable codes | 0 = No write-in of HIV<br>1 = Write-in indicating presence of HIV |
| | Description/derivation | **UDS subjects:** This variable is designed to flag subjects for whom a clinical diagnosis of "HIV", or similar indicative text, was written-in on Form D1. Please note that this variable flags the presence of a write-in only, and not whether the condition was considered to contribute to cognitive impairment.<br>**MDS subjects:** nacchiv is not calculated for MDS subjects because the MDS did not have a write-in option for clinical diagnosis. |
| 40. | Variable name | **naccmnd** |
| | Short descriptor | Motor neuron disease write-in on Form D1 |
| | Data type | Numeric longitudinal |
| | Allowable codes | 0 = No write-in of ALS<br>1 = Write-in indicating presence of ALS |
| | Description/derivation | **UDS subjects:** This variable is designed to flag subjects for whom a clinical diagnosis of "motor neuron disease" (including "ALS" or similar indicative text), was written-in on Form D1. Please note that this variable flags the presence of a write-in only, and not whether the condition was considered to contribute to cognitive impairment.<br>**MDS subjects:** naccmnd is not calculated for MDS subjects because the MDS did not have a write-in option for clinical diagnosis. |
| 41. | Variable name | **naccpca** |
| | Short descriptor | Posterior cortical atrophy (PCA) write-in on Form D1 |
| | Data type | Numeric longitudinal |
| | Allowable codes | 0 = No write-in of PCA<br>1 = Write-in indicating presence of PCA |
| | Description/derivation | **UDS subjects:** This variable is designed to flag subjects for whom a clinical diagnosis of "PCA", or similar indicative text, was written-in on Form D1. Please note that this variable flags the presence of a write-in only, and not whether the condition was considered to contribute to cognitive impairment.<br>**MDS subjects:** naccpca is not calculated for MDS subjects because the MDS did not have a write-in option for clinical diagnosis. |
| 42. | Variable name | **nacccanc** |
| | Short descriptor | Cancer or tumor write-in on Form D1 |
| | Data type | Numeric longitudinal |
| | Allowable codes | 0 = No write-in of cancer<br>1 = Write-in indicating presence of cancer |
| | Description/derivation | **UDS subjects:** This variable is designed to flag subjects for whom a clinical diagnosis of "cancer", or similar text indicative of a tumor or of cancer treatment, was written-in on Form D1. Malignant and benign tumors may be included, and the condition may not be active on that visit (e.g., may be in remission or post-treatment). Please note |

that this variable flags the presence of a write-in only, and not whether the condition was considered to contribute to cognitive impairment.

**MDS subjects:** naccanc is not calculated for MDS subjects because the MDS did not have a write-in option for clinical diagnosis.

| 43. | | |
|---|---|---|
| | **Variable name** | **naccmdss** |
| | **Short descriptor** | Subject's status in the Minimal Data Set (MDS) and Uniform Data Set (UDS) |
| | **Data type** | Numeric cross-sectional |
| | **Allowable codes** | 1 = In the UDS and MDS<br>2 = In the MDS Only<br>3 = In the UDS Only |
| | **Description/derivation** | **UDS and MDS subjects:** Data collection for the MDS ceased in 2005, at which point the UDS began. Thus, some subjects are included in both the MDS and the UDS. This variable is designed to identify subjects who started participation in the MDS and continued participation in the UDS, as well as participants who participated in the MDS only or who have participated in the UDS only. Note that although this variable is listed for all visits, it does not change across visits; it is cross-sectional. |